

Date: Friday, 7/28/2006 11:51:27 AM
 User: Jean-Luc Menard

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : X-BOLT SPACER
Job Number : 28034	
Estimate Number : 12469	
P.O. Number : <i>N/A</i>	Part Number : D35043
This Issue : 7/28/2006 S.O. No. : <i>N/A</i>	Drawing Number : D3504 PRELIMINARY
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : MACHINED PARTS	Drawing Revision : PREL
Previous Run : 27778	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 8/4/2006 Qty: 10 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est Rev: A New Issue 06-08-20 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6T0375W049	6061-T6 Tube .375 x.049W
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Comment: Qty.: 0.2972 f(s)/Unit Total : 2.9715 f(s)

6061-T6 Tube .375 OD x.049W

(M6061T6T0375xw.049)

Batch: *19328 M18730*

*next page
attached*

BC 06.07.29 10

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL

1-TURN AS PER FOLIO FA643 & DWG D3504 ,

FOLIO REV: *N/A*

DWG REV: *A*

2-DEBURR AS REQUIRED

BC 06.07.29 10

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

BC

06.07.29

10

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

S.G

06/07/29

10

5.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

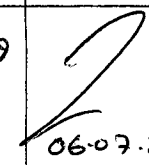
Identify and Stock

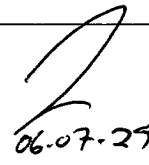
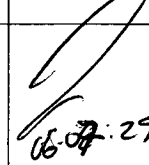
Location: *ST4H8*

AB

06/07/31

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
06.07.29	1.0	Material: M6061T6T0375xW.049W was not available use M6061T6T0375xW.058W instead Drill out to $\phi 0.277$ SC	PH SC	06.07.29	10	PH 06.07.29	 06.07.29

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
06.07.29	1.0	Material M6061T6T0375xW.049W not available Use M6061T6T0375xW.058W	PH 06.07.29	Drill ID as per DWG φ 0.277 This time only Acceptable to substitute.	P SC 06.07.29	 06.07.29	PH 06.07.29	 06.07.29

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 06/08/27

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: X-BOLT SPACER

Job Number: 28034

Part Number: D35043

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

06/08/09

12

Job Completion

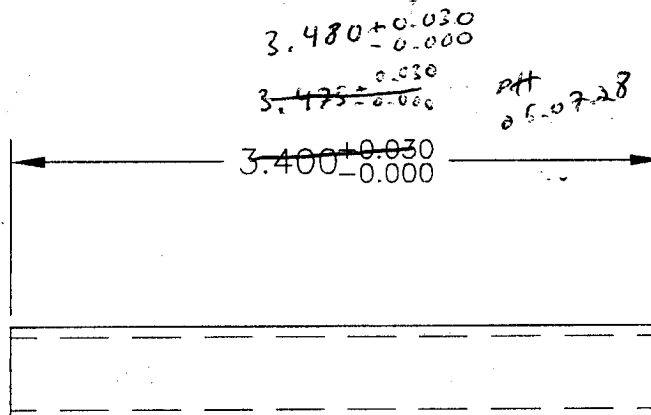
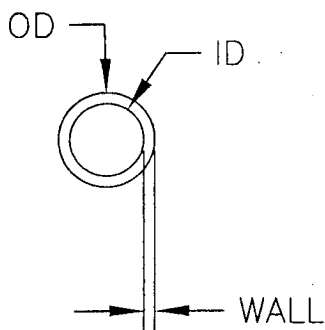


After closing w/o return
to AH 06.08.09

06.08.09

DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO. D3504	REV. A SHEET 1 OF 1
DATE 06.04.21		TITLE CROSS BOLT SPACER	SCALE 1:1
A	06.04.21	NEW ISSUE	

PROTOTYPE
PLEASE RETURN ALL ISSUED
DATA TO ENGINEERING
06-07-28 *PH*



D3504-1/-3 CROSS BOLT SPACER PARTS LIST

PART NUMBER	OD	WALL	ID (REF)	MATERIAL SPEC
D3504-1	0.500	0.049	0.402	M6061T6T0.500W.049
D3504-3	0.375	0.049	0.277	M6061T6T0.375W.049

D3504-1/-3 CROSS BOLT SPACER

- 1) MATERIAL: 6061-T6 TUBING PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8
- 2) FINISH: NONE
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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m6061T6 T0375 x W.058 m18730

P.O. MN8864

KAISER CHANDLER

CHANDLER PLANT
BOX 8011 8572 W. HILL ROAD
CHANDLER AZ 85226
PH: 602.798.1087
FAX: 602.798.0890
SALES: 602.822.8274

**CERTIFICATION and
PHYSICAL TEST RESULTS**

QP 026A

These results are for **MARMON/KEYSTONE CORP**
Mill Number **175-40998.** Purchase Order No **80-13881-002**
Alloy **6061** Temper..... **T6**
Part No, Item No, Commodity No or Inventory No
Size Description. **.375 IN OD X .058 IN WALL**
Specification(s). **WW-T-700/8F ASTM B210-02 AMS 4082N**
Additional procedures as called for on Specification:
MADE IN U.S.A. WE TAKE EXCEPTION TO PARA. 5.2.1. Per AMS 4082N, WAS NOT OILED.

Limits	Chemical Composition			Per Aluminum Standards and Data 2003								
MIN	0.40	0.15	0.15	—	0.8	0.04	—	—	—	—	Es 0.05	Remainder
MAX	0.8	0.7	0.40	0.15	1.2	0.35	—	0.25	0.15	—	Total 0.15	
Actuals	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al	
	0.62	0.29	0.22	0.02	0.97	0.05		0.04	0.02			
	0.63	0.31	0.23	0.02	0.98	0.06		0.03	0.02			
											Each 0.05	Remainder
											Total 0.15	

* For WW-T-7004 specification, maximum Si plus Fe is .45%.

** 1100 Alloy Max Si + Fe is 0.95 %

Mechanical Properties				
Lot #	Temp	Yield PSI	Ultimate PSI	Elongation %
40897	A178	43,900	47,900	13
40897	B178	43,700	47,400	12

We hereby certify that the material covered by this report has been inspected in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description; and that samples representative of the material met the composition limits and had the mechanical properties as indicated.

Date 11/03/2004

C E Brooks

C. E. BROOKS
Tech. Mgr. Tube

Certified

Q. C. REVIEWED

AT .375.058 734